# Choosing & Evaluating Emergency Animal Burial Sites at CAFOs

Presented by

DENNIS DEGNER, Ph.D., P.E.

Section Chief, Solid Waste Permits Section

Bureau of Waste Management

Kansas Department of Health and Environment

### Basic Principles of Preparedness – 5 Ps

- $\overline{P} \overline{Prior}$
- P Preparation
- P Prevents
- P Poor
- P Performance

## Topics covered in this session:

- How to choose & evaluate a burial site.
- How to apply for a pre-selected burial site.
- Example site evaluation.

#### How to choose & evaluate a burial site:

- Main Considerations:
  - Location
  - Geology/Soils
  - Logistical Issues

#### Location

- Nearby for quick disposal & prevent disease spread
- Away from...
  - feed lot pens if they will be repopulated
  - water supply wells
  - dwellings, schools, daycare, hospitals,
     restaurants, public roads, parks, cemeteries
  - airports

# Location (continued)

- Avoid...
  - historical/archeological sites
  - critical habitat for endangered/threatened species
  - surface waters/wetlands
  - 100-year flood plains
  - sensitive groundwater areas
  - utilities
- Provide vertical separation from groundwater table

### Location (continued)

- Property owner permission required\*
- Local government approval required\*

\* When emergency occurs

# Geology/Soils

#### • Avoid...

- unstable areas (sinkholes, etc.)
- areas with porous/fractured bedrock
- areas with fast-draining soils
- areas with shallow groundwater table
- areas with high groundwater flow rates

### Logistical Issues

- Large enough site to fit the burial trenches and staging areas
- Access for heavy equipment
- Safe work setting
- Control drainage
- Soil cover
- Equipment washdown/decontamination
- Land use limitations
- Ability to monitor the site
- Etc.

# How to apply for a pre-selected burial site:

- Application form in your workshop manual & available at www.kdhe.state.ks.us/waste.
- Basic information needed:
  - Company name & contact info
  - Site location & size
  - Type & number of animals
  - Groundwater table elevation

# How to apply for a pre-selected burial site:

- Basic information needed (continued):
  - Map of site showing nearby features (roads, buildings, wells, etc.)
  - Flood map with site location shown
  - Sensitive groundwater map with site location shown
  - Property ownership info
  - Soil type

## Application (continued)

- The application does NOT authorize you to bury animal carcasses or other types of waste!
- If an emergency occurs, you must request authorization at that time.
- The authorization request should be made on the Guideline for Disaster Response: Solid Waste Management Authorization Application form in your workshop manual.

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT 1000 SW Jackson Street Topeka, KS 66612

# GUIDELINE FOR ANIMAL DISEASE EMERGENCY RESPONSE Solid Waste Management Authorization Application



I,	o used for this disposal pur	, the property
Location Phone		
City	State	Zip
Location Address		
Property Owner		
County 1/4	1/4 Sec	T R
<b>Disposal Site Information</b>		
Projected date disposal will end		_
Date disposal will begin		
How was waste generated?		
Amount of waste		
Type of waste		
Type of Facility (please check one)	Transfer Site	Disposal Site
Disposal Information		
Phone	Fax	
City	State	Zip
Mailing Address		
Livestock Facility Owner/Operator		
Applicant Information		

Disposal of Solid Wast	e Resulting from	n an Animal D	Disease Emergency
Page 2 of 2			

Application shall be made by the livestock facility owner/operator.

The livestock facility owner/operator agrees to the following:

- 1. A site cleanup and closure plan shall be developed and submitted to the Department for approval.
- 2. No additional waste may be brought to the site following the Department's approval of the site cleanup and closure plan. The disposal area must be covered with a minimum of three feet of soil and seeded, rocked, or paved.
- 3. The livestock facility owner/operator shall provide for post-closure maintenance of the area.
- 4. A restrictive covenant shall be filed for all areas where waste is disposed.

Signature of the livestock facility owner/ope	rator taking responsibility for the si	te:
	DatePosition /Title	
Name(printed)		
(this section to be completed by local gove disposal site)	rnmental or zoning authority hav	ing jurisdiction over the
Approved by(local governmental or z	Date	
Name(printed)	Position /Title(printed)	
Signature		
(This section to be completed by autho Health and Environment)	rized representative of the Kai	nsas Department of
KDHE approval as per authority under K	C.S.A. 65-3407c(a)(5).	
Authorized KDHE Representative		Date
Name(printed)	Position/Title	

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT 1000 SW Jackson Street Topeka, KS 66612

# GUIDELINE FOR ANIMAL DISEASE EMERGENCY RESPONSE Solid Waste Management Authorization Application



Applicant Information		
Governmental Authority		
Mailing Address		
City	State	Zip
Phone	Fax	
Disposal Information		
Type of Facility (please check one)	Transfer Site	Disposal Site
Type of waste		
Amount of waste		
How was waste generated?		
Date disposal will begin		<u> </u>
Projected date disposal will end		_
<b>Disposal Site Information</b>		
County 1/4	1/4 Sec	T R
Property Owner		
Location Address		
City		
Location Phone		
I, owner, agree to allow this property to be		ose.

Application shall be made by the local governmental authority having jurisdiction over the area.

The local governmental authority agrees to the following:

- 1. A site cleanup and closure plan shall be developed and submitted to the Department for approval.
- 2. No additional waste may be brought to the site following the Department's approval of the site cleanup and closure plan. The disposal area must be covered with a minimum of three feet of soil and seeded, rocked, or paved.
- 3. The local governmental authority shall provide for post-closure maintenance of the area.
- 4. A 5 year restrictive covenant shall be filed for all areas where waste is disposed.

Signature of the Local Governmental Authority taking responsibility for the site:		
	Date	
Name(printed)	Position /Title	
(this section to be completed by local gover disposal site)	nmental or zoning authority having jurisdiction over the	
Approved by(local governmental or zo	Date	
Name(printed)	Position /Title	
Signature		
(This section to be completed by author Health and Environment)	rized representative of the Kansas Department of	
KDHE approval as per authority under K.	S.A. 65-3407c(a)(5).	
Authorized KDHE Representative	Date	
Name(printed)	Position/Title	